DOCUMENT RESUME

ED 207 749 RC 012 923

TITLE	You Alone in the North Woods: The Lost Hunter's Guide.
INSTITUTION	New Hampshire State Fish and Game Dept., Concord.
PUB DATE	[2 Oct 81]
NOTE	59p.
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Adult Education; *Adventure Education; Clothing; *First Aid; Food; *Map Skills; *Outdoor Activities; Outdoor Education; Rescue; Safety; *Safety Education
IDENTIFIERS	Hiking; *Hunter Safety; Hunting; Lost Persons; *Survival Education; Survival Equipment; Survival Skills

ABSTRACT

Although designed for the lost hunter, this 4 by 5 1/2 inch handbook of survival guidelines is compact enough to be included in the backpack of anyone venturing on an outdoor, wilderness expedition in the north woods. Twenty-one major sections provide information and some illustrations about: what to include in a survival kit; the importance of informing a responsible person where you are going and when you plan to return; proper clothing and footwear; using maps and compasses; overnight preparation when lost; fire making procedures; fire starting in the rain; shelters; what to expect and do when spending the night while lost; keeping warm; signals; mental control; edible wild foods; first aid (cuts and wounds, fractures, sprains, frostbite, prolonged exposure to cold, shock, burns, heart attack); water safety; loading a boat; cold water survival and rescue; and special warnings for snowmobilers. Also included is the six-point sportsman's code advocating adherence to game laws, use of proper weapons, respect for the rights of property owners, courtesy for fellow hunters, proper shooting, and hunter safety. (NEC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

10/2/82

ED207749

YOU ALONE

in the

NORTH WOODS

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

✓ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

THE LOST HUNTER'S GUIDE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Rebecca B. Towle

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Support Your State
Hunter Safety Program

RC 012923

This is your personal survival manual. Read it thoroughly *before* your trip into the north woods, then carry it with you when you go.

NAME _____

ADDRESS _____

_____ _____

PHONE

Medical problems, if any (include drug reactions):

_____

_____

_____

_____

_____

_____ _____

BLOOD TYPE

In case of accident or serious illness, please notify:

_____ _____

ADDRESS _____ _____

_____ _____

PHONE

YOU ALONE

in the

NORTH WOODS

A HUNTER'S PRACTICAL GUIDE TO WOODS COMFORT, SAFETY, AND SURVIVAL

New Hampshire State Department
of Fish and Game

2-B

CONTENTS

	PAGE
Be Prepared—Have a Survival Kit	4
Let Someone Know	6
Dress Warm—Stay Warm	6
Boots	11
Map and Compass	11
Overnight Preparations	19
Fire is Survival	21
Fire Starting in the Rain	26
Shelters	27
Spending the Night	29
Tips to Keep Warm By	32
Signals	33
Mental Control	38
Edible Wild Foods	39
First Aid	41
Water Safety for Outdoorsmen	45
Loading Your Boat	49
Cold Water Survival	50
Water Rescue	53
Special Warning for Snowmobilers	56
Flotation Devices	58

BE PREPARED—HAVE A SURVIVAL KIT

Before you go into the north woods, provide yourself with a simple survival kit, one that can easily be assembled from camp or home supplies. Take care of your kit; use it only in an emergency; and keep it on your person at all times. Listed below are many items that are contained in a good survival kit. Those that are marked with an asterisk (*) are required items, and you should never enter the woods without them; the remaining items are optional.

*Spare knife or small belt axe
*Waterproof matches
*Spare compass
*12 extra ammo
*Personal medicine (if necessary)
*Chocolate

Space sticks
Hard candy
Instant soup
Coffee or tea bags
Salt packs
High protein meats (Canned Vienna sausage)
Sugar (cubes or packs)
Instant cocoa
Dry cream (packs)
Dried fruit
Chewing gum
Space blanket
Iodine
Aspirin
Bandaids
Cup or foil plate

Needle and thread
Hooks, line, flies
Flashlight
Metal signal reflector
3 ft. x 3 ft. square of aluminum foil
Wax-soaked cardboard fire starters
Safety pins
Plastic tape
Light wire
Nylon rope
Flint or metal match
Plastic bags
Plastic garbage bag
Spare glasses (if necessary)

These items, even in moderate amounts, will provide nourishment and a sense of well-being if you become lost. The amount of each may be adjusted to your individual needs and tastes. There are other things that may be added, but try to keep the package small and light so as to be conveniently carried at all times.

BEST COPY AVAILABLE

LET SOMEONE KNOW

Along with your survival kit, you have one other obligation to fulfill before entering the woods: **Make sure you tell someone where you are going and when you plan to return.** Also don't hide your car, leave it where it can be easily found and used as a starting point for searchers, should a search be necessary.

DRESS WARM—STAY WARM

Guides and woodsmen-of-old were well aware of the principles of keeping the body warm. Early sports were amazed that their guides could stay so comfortable while seemingly so lightly clad. These early woodsmen were active individuals, whether at play or work, and they soon found that bulky garments were a handicap.

They knew that wool, even when wet, retains warmth far longer than flannel or cotton. Full-length, woolen underwear helped many a log driver survive an early spring plunge into the cold river.

Early woodsmen's trousers were woolen, also, cut full for warmth and ease of movement and for comfort when kneeling in a canoe. Their trousers were thick and heavy woven, and nobody worried much in those days about creases and wrinkles. Deep, canvas pockets held extra food, a knife, string, matches, and other survival gear.

Standard footwear consisted of heavily greased leather boots or rubber pacs worn over hand-knit woolen stockings, usually two pair in extra-roomy footwear. Stockings were dried every night and rinsed frequently to keep them fresh and to fluff the nap for greater insulation. Newspapers (several thicknesses), sheepskin, or felt batting was frequently used for insoles.

Their shirts were usually heavy flannel nearest the body (over long-handled underwear) with two woolen shirts over the flannel one. They had long known the importance of allowing the body to ventilate, so they kept the neck open and wore a bandana tied loosely about the throat. This also served to keep out pine spills, rain, and snow and could be used as a bandage, sling, or tie-down over their felt hats when "it blew hard."

Speaking of hats, today's hunter should always wear one of hunter orange color. The old guide's hat was usually felt, peaked at the top, and wide-brimmed enough for shade and moisture run-off. As the weather grew colder, he switched to a fur hat—much like present "trooper" styled hats—that could be tied down around the head.

WOOL UNDERWEAR
GREASED LEATHER BOOTS
WOOL SOCKS
THE CLOTHING WORN BY AN OLD NORTHWOODS GUIDE"
WOOL PANTS WITH DEEP POCKETS
A BANDANA AROUND THE THROAT KEEPS OUT RAIN etc. also a WOODSMAN CAP FOR ADDED COMFORT
EQUIPMENT THEY CARRIED
FOOD
KNIFE
STRING
MATCHES

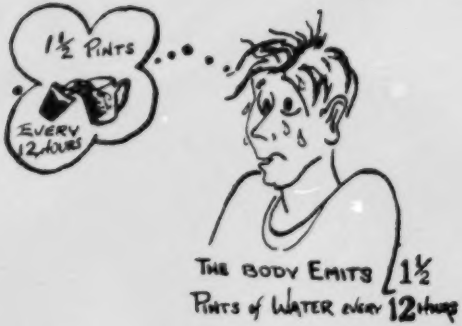
Handwear was limited pretty much to knitted mittens with a thumb and forefinger to allow both dexterity and ease of shooting. They were quite frequently reinforced with elastic or a rubber band around the wrist. Also, these guides always took extra precaution to make sure their mittens were somehow attached to them, so they wouldn't be left somewhere or lost overboard.

While today's hunter wears a lightweight down or dacron coat during the winter, early guides wore a greatcoat of lined canvas, extra-heavy wool cloth, or sheepskin. Of course, this was not used to work in but rather to afford protection when traveling and moving about. It was removed and hung to air-dry when engaged in hard labor like splitting wood.

Though times have changed and modes of dress have changed, the principles that the early woodsmen applied in keeping warm should be taken into account.

By now, we have established the value of nature's own great insulator—air—and her own natural clothing—wool. It is a pretty well accepted fact that the amount of insulation is more important than the kind, and when dressing for the outdoors, even with today's lightweight clothing, attention should be paid to this dead air principle.

Today's lightweight garments have remarkable ability to withstand penetrating winds, but often they do not effectively allow for evaporation of perspiration, which can amount to 1½ pints of water every 12 hours. This trapped moisture can be a serious prob-



lem in a survival situation, as it becomes difficult to dry out before retiring for the night.

A better approach is to wear wool and to carry with you a lightweight poncho which will give maximum protection from wind and rain while permitting the body to ventilate thoroughly. A hunter orange vest over your coat will add more protection as well as being an important safety item. The poncho can be used as part of your shelter in an emergency, your bedroll at night, a roof when it is raining, or something to carry water in. You can huddle under it during a severe storm, carry a fellow outdoorsman on it as a stretcher between two poles, or use it as a signal cloth, and it has a host of other uses. A poncho can even serve as an emergency flotation device if you capsize; simply fold it to trap air, and dog paddle along with it. Ponchos are light and amazingly strong, and they fold to an easily-carried package.

BOOTS

Boots fall into three main categories: all-rubber, all-leather, and rubber-bottomed, leather-topped. Whichever you choose, make sure they fit properly with the stockings you would normally wear.

The all-rubber boot is waterproof, of course, but leaves a lot to be desired in ankle support and does not allow ventilation. The all-leather, waterproofed boot is warm and sealed by silicone to the extent that all ventilation is excluded. Heavy moisture buildup can be expected in both of these boots, and they must be well dried after every use. Felt insoles will help solve moisture problems, as they draw the moisture into them and away from the feet and socks.

Since the rubber-bottomed, leather-topped boot allows some ventilation through the leather, gives good ankle support, is warm, adjustable, withstands punctures, and is waterproof, we can say that it has more desirable survival qualities than others. This boot can be bought with an insulated bottom for extra warmth or with a heavy felt liner that should be removed each night and dried.

It is a good practice to carry an extra pair of stockings when traveling for a day, as they will go a long way toward helping tired feet and warming cold ones. A dry pair of socks will feel like a million dollars if your others get wet.

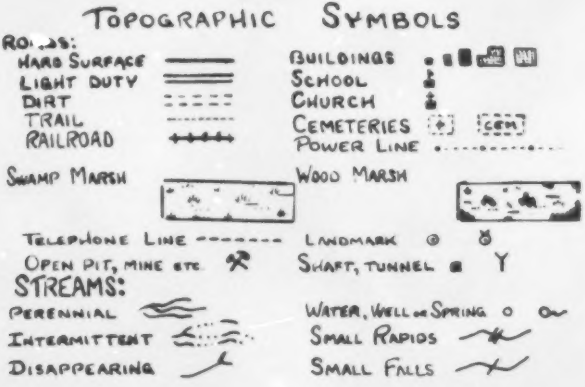
MAPS AND COMPASS

Now that you are properly prepared with a survival kit and are properly dressed to enter the woods, let's

talk about the most important of all your survival tools, the map and compass. First, forget any ideas you may have that map and compass work is difficult; actually, it is as simple to understand as 5th grade arithmetic.

Topographic Maps

A "topo" map is simply a drawing of an area as seen from the air. The various symbols and lines tell an experienced reader just as much as would a story. These maps may be purchased at any well-stocked sporting goods store or bookstore or from U. S. Geological Survey Map Office, 1200 S. Eads St., Arlington, Virginia 22202. The best scale is 1 inch equals 1 mile.



12

A topo map furnishes five important pieces of information concerning your area of interest. We have already given one, distances. The others are descriptions, details, directions, and designations.

Directions may be determined by noting at the bottom of the map an arrow that shows the magnetic north and true north. We are interested in magnetic north, and you can usually assume as you look at a map that north is at the top and south is at the bottom. With this in mind, you can easily tell how major landmarks lie in relation to your base of operations.

Details of importance are: Man-made features (black), water (blue), vegetation (green), and elevations (brown). Study your topo map for a while, and notice the brown contour lines. They will be far apart in some places and near together in others. Pick a steep hill you know, and notice how tightly its contour lines are on your map. This will show you how to avoid steep climbs. These lines show that as you walk from one to another you are going up 20 feet in height, so if the lines are close together, you are in for a hard climb.

Declination

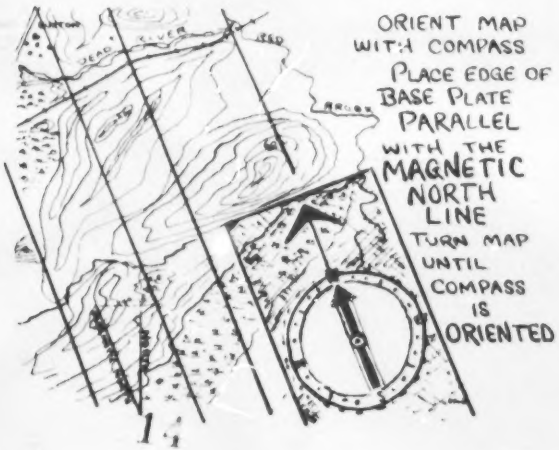
Declination, simply put, is the difference between magnetic north and true north. There are several complicated ways to allow for this difference, but we're not interested in any of them.

As soon as you can after purchasing your map, continue the north-south magnetic line (at the bottom of the map) all the way up through the map. Draw

other lines parallel to it one inch apart and up through the map. These will be your magnetic North-South lines.

Now when you use map and compass together, they will read exactly alike and you need not worry about declination. An additional feature of your NS lines is that they are one mile apart on a one inch to one mile map. You can easily estimate distances at a glance.

To orient your map and compass, set the compass on the map and turn the map until the magnetic North-South lines are aligned with the North-South arrow of your compass. The map is now oriented.



If you have a plan of hunt, so to speak, you may find all the bearings at one time and mark them on the map. Later, as you hunt, simply set your compass to the desired bearings as you come to them. This saves time and eliminates errors, as you are keeping an accurate log of your trip.

Also, in planning your hunt on the map, you should establish the boundaries of the area you will be hunting. Perhaps a road of some sort on the south, a river on the west, an old railroad bed on the north, and a hauling road on the east. This way you won't hunt farther from your camp or car than you had intended —a basic point to remember if you want to avoid spending a night in the woods.

Often, hunters in a party will plan the day's hunt on a map at camp in the morning. They decide where each will hunt that day and where they will eat their lunch. At noontime, each will fire a shot, with the oldest man shooting first. This method assures that all members of the party are accounted for at noon.

Before entering the woods—whether at an old logging road, a town or county road, or from camp itself—you should check your compass and bearings. This assures, for one thing, that you have not left the compass in another pair of pants or on the camp table. It also serves to establish the direction in which the road is running and, most important, determines the general direction or course which you must follow to return to the road from anywhere in the general area where you are to hunt. This direction does not need to be specific to an exact bearing but simply an approximate bearing. If you follow a deer track for a

couple of hours, or attempt to catch up to a wounded deer, it will be impossible to follow an exact bearing. If you simply know that a southeasterly course will put you back on the road within a half mile or so of where you left it, you have all the knowledge needed.

You must be sure that you take that all-important bit of knowledge into the woods with you and have it recorded in your mind or on paper; in strange country, it is better to have it on paper and not to trust your memory. In addition, be equally sure to have the topographic map of your area carefully folded in your pocket or survival kit.

The older and more experienced hunter or woodsman in your party should assume the responsibility of being certain that the less experienced hunters have their compasses, maps, and return bearings and know the lay of the land before leaving camp or the car.

Finding Directions with Conventional Compass

Assuming that you wish to walk to a certain spot—a hill, lake, or other landmark—you can do so even if you can't keep it in sight. There are two ways: first, by taking information from a map, and second, by using your compass. When using the field sight method, face the object and hold the compass in front of you so the needle is directly over the N for north. Sight across the compass to the object. The direction will be expressed in degrees, and you must memorize it or write it down.

You can now walk to your destination even though you go from hill to gully and lose sight of it. Pick

objects to walk to that are directly in your compass line, and walk to one after the other until you are there. Remember, even if you have traveled this

piece of woods before, check every landmark and noteworthy feature against your map.

After you have hunted the area, you can return to the road you left from by simply adding or subtracting your previous bearing. Let's say that the bearing you were traveling was 100° east. Add 180° to this, making your return bearing 280° west, or the direct opposite of the bearing you went into the woods on.

Pinpointing an Object

You already know that it is easier to aim for a fairly large object than for a house or camp, etc. It

is possible, however, to re-locate a specific site by the following means:

Your favorite area has produced many good deer, and you have just shot a 200 pounder. You can hardly move him to dress him, and you'll certainly never drag him out alone. First, you blaze a fairly large circle about him and maybe tie pieces of your bandana around the area.

From your knowledge of the lay of the land—because you've studied your area map—you know a good hauling road is nearby, directly north of you. So you take a north bearing of 360°—noting landmarks along the way. When you hit the road, mark the spot carefully and head back to camp for help. You can save a great deal of work in a situation like this by writing details of the trail in your notebook and even counting steps for distance. When you go back, you will have the return bearing all set for you. Once you have got help, all you have to do is walk back on a south bearing of 180°. The landmarks are familiar, but say you can't find your bear. Mark the spot where you have stopped, walk in widening circles, and there he is!

Using a Watch as a Compass

To find north with your watch, point the hour hand directly at the sun. The point half-way between the hour hand and twelve o'clock will be south, and therefore, the exact opposite point on your watch will be north. This is at best a survival technique and shouldn't be relied on as a replacement for a good compass.

By Way of Review

In order to travel about freely in the woods and fields, you need to follow three basic rules. Place your compass on the map, set the compass by the map, and set yourself by the compass.

Again, we want to emphasize that you can read these words until the black bear turns white, and they'll do you little good unless you practice them. Start in your yard, field, or nearby city park until you know the art completely. Only then should you head for the big woods.

We might stress a waterproof cover for your map or a treatment of some kind that will protect it. Once you find the ability to travel with map and compass, it is so honestly simple you'll use that ability at every opportunity.

One final rule with compass work: **Believe your compass under all circumstances** (unless it is obviously broken)—it is your most important piece of survival equipment.

OVERNIGHT PREPARATIONS

There is little else we can do to prepare you to hunt in the woods so let's turn to the other side of the coin. You are now hunting alone in the Ten Thousand Acre Tract southwest of Rockwood. You shot at a big buck about noon and have been tracking him ever since. It's clouded-over now and getting along towards sunset. You stop to get your bearings, and slowly that indescribable feeling creeps over you as you realize that in the excitement of the hunt you have traveled quite a

distance, and, worse, you aren't really certain which way to go to get out.

Are you truly lost, or are you just turned around? Sit down and gather your thoughts. Be honest with yourself. Have a smoke, and maybe you can figure out where you are. Maybe you can hear a train, a highway, or a chainsaw. If it were early enough in the day, you could afford to try to find your way out, but don't kid yourself; if it is within an hour or so of sunset, you had best prepare to spend the night, as no one can safely wander lost through the woods after dark. At this point, the best words of advice are "To thine own self be true." If you are lost, admit it, and decide right now to keep your head, as your only enemy is panic.

Do not suppose that dense, trackless forests don't sometimes baffle or confuse even experienced woodsmen. Was it not Daniel Boone who said he'd never been lost, "only bewildered"? He meant, of course, he was always prepared to spend a night out and find the way in the morning. And so it should be with you.

Look on the situation as a challenge. Make plans and establish goals. Take a few minutes to think them over and write them down. What should be done first? What can wait until later?

Your first decision should be the selection of your encampment. In this choice, you should keep in mind natural shelter. The side of an open hardwood ridge affords little natural shelter from either wind or rain. A better bet would be an area similar to the area a deer chooses for his winter yard. Try to find a place

with a canopy of green growth on the edge of more open hardwoods. Such a site will afford natural shelter as well as an abundance of dead firewood. If it is near a clearing or a shoreline, so much the better, as this would make it easier for you to signal a rescue plane. Also, the availability of drinking water should be considered in picking your campsite, but don't set up near a roaring brook or a waterfalls—you wouldn't be able to hear signal shots or your rescuers' shouts. Also don't set up camp under a tree loaded with snow; it might come down on you or your fire.

There will be more on the actual construction of shelters later, but for now, you have chosen your campsite, and you should put all your energy into the most important factor in any survival situation—your fire.

FIRE IS SURVIVAL

Since you have decided to spend the night rather than wander about aimlessly, you had better start gathering plenty of wood and getting a fire started. Put all thoughts of being lost out of your mind. Things are not as bad as they seem. There are wood cutters, game wardens and your fellow hunters in the woods, possibly quite near by. As soon as your fire is lively, you'll feel as man has felt for centuries: dominant, secure, and comforted. Indians said fire had three powers: warmth, companionship, and the power to ward off the bad spirits.

Where man finds work, he finds contentment, and gathering firewood is a positive action that will relieve you of the burden of imagined danger. As you work by

the methods and steps we'll outline for you, think ahead to the next step. Try to concentrate on what you are doing, not on your plight. There is no animal in the woods that will harm you, so all your effort should be put into making yourself warm and comfortable against the elements. You can do it. Remember, this is how the Indians lived, and history shows they led remarkably rewarding lives.

The most important item of fire starting is a thorough knowledge of fire starters and kindlers. Wooden, scratch-anywhere, kitchen matches should be the only ones carried. Leave the paper ones at home, as they just build false security. Your matches should be made waterproof by dipping them in melted paraffin wax. Two dippings of the wax used in home canning will give good protection; the whole match must be covered. These matches should never be used except in extreme emergency. However, you should try a few at home after waxing them to make sure they work. A separate supply of matches should be carried by the smoker for everyday uses.

A strong, plastic, pill bottle makes a good watertight receptacle to carry your matches in, but it is hard to beat commercially produced metal containers.

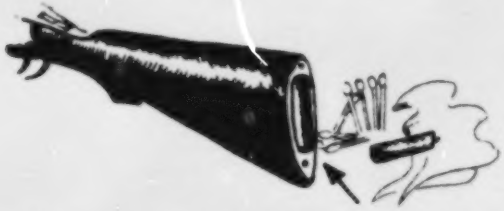
TWO SPENT SHOTGUN SHELLS OF VARYING GAUGE PROVIDE A SIMPLE MATCH CARRYING CASE.....

22

A common candle is a useful addition to your fire starting kit, as it will ignite easily, will burn for a long time, can be used many times, and also provides illumination. Some people carry a small amount of lighter fluid, but again, this tends to build false security, and you are much better off with some good, dry, flammable tinder and waterproof matches.

An excellent combination for emergency situations would be two dozen waterproofed matches and a candle carried in your gunstock. A dry rag can be stuffed down on the items for use as tinder and to keep the items stationary. This will not weaken the stock, and you will always have with you the materials to start a fire in any emergency.

The use of gunpowder and other fire-starting tricks have no place in a manual of practical survival techniques. For your purposes, preparedness should carry more emphasis than gimmicks. The carrying of flint and steel or a metal match as a backup measure is



MATCHES, CANDLE AND A RAG PLACED IN THE GUNSTOCK COULD SAVE YOU.....

recommended, however, as these will work if you can find dry tinder. Before including these spark-makers in your survival kit, you should experiment with them so you are thoroughly familiar with the principles involved in their use.

Nature herself provides many excellent fire starters. Birch bark contains an oil that will ignite even when wet. Almost any dead twigs will serve as a kindler, as will dead tree moss, leaves, and grass. If dry, nearly all dead wood will burn. Always start with small pieces and work up to larger materials. As the fire becomes larger and hotter, you can start to put on damper and greener wood. Make sure to prepare your fire spot properly so as not to start a forest fire.

A good supply of kindling should be kept handy in case the fire goes down during the night. Make all your movements count—even your supply of wood

BEST COPY AVAILABLE

BEST COPY AVAILABLE

can be used as a wind break by careful arrangement; it will conserve fuel and reflect heat.

How much wood is needed to sustain a fire overnight? A good rule of thumb is to gather what you think is needed and then double the size of your pile. It will take a lot of wood to get through the night. A good test is to measure your fire's consumption for one hour and then multiply this by the number of hours you will be in darkness. In gathering fuel a small belt axe is worth its weight in gold, and the carrying of such an axe probably is more important than carrying a heavy revolver on your belt.

Do not eliminate any possibility for fuel. Larger logs may be thrust into your fire and burned through, making two, and so on. Wet wood can be stacked near or over your fire on a frame of sticks. Use some imagination, and work quickly.

As a windbreak, green wood or wet wood is surpassed only by stones. Fashion your windbreak into a vee shape, or square, with one side open toward your shelter. This has a fuel-saving feature as it eliminates excess drafts, and it stops sparks from flying around and dries more fuel for later use.

So far, we have assumed mainly dry conditions, but more often, people become lost on rainy days when clouds hide their landmarks and the sun.

FIRE STARTING IN THE RAIN

Here is where the hunter who carries cardboard squares which have been soaked in wax will be well-off, as these almost guarantee a ready fire. These squares will burn for as long as two minutes and eliminate the need to attempt starting a fire with wet natural tinder.

Other common household articles can be soaked in melted wax and carried in your survival kit for use as tinder. Cotton rope, newspaper strips, paper towels, and paper dinner napkins all have been found to make good tinder when dipped in wax. These

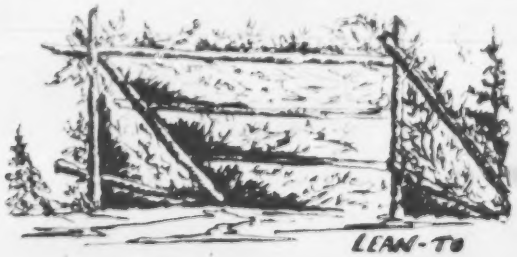
take up very little room and can be slipped into a plastic pouch with your matches.

The impossible situation may seem to be starting a fire during a downpour. You should look under bankings, rocks, brushpiles, and downed trees for kindling. Protect it from weather with a shirt, by bagging it, or keeping it under your poncho until you are ready to use it. Birch bark may be nearby; gather lots of it and dry, dead limbs under dense evergreens.

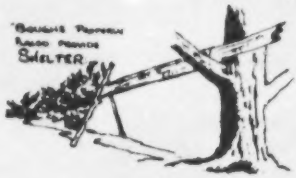
One of the great items for kindling is the shaving stick or "fuzz" stick. This is a dry stick that has been whittled but the shavings held on by stopping the cut just short of the end of the stroke. These are rapid fire starters—nature's own—and a little practice will make you expert at fire starting. Dead, dry, softwood limbs are especially good for this purpose.

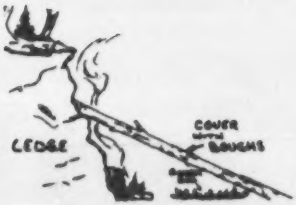
SHELTERS

You should have a shelter during foul weather or if it is threatening. A lean-to can be made by placing



poles against a ledge or bluff. Evergreen boughs may be used for a roof by placing them with the tip-ends up; they will shed water when arranged in this manner. Also, a generous supply of evergreen boughs should be placed on the ground beneath you. Refer to the shelters illustrated, and choose the one that is best suited for your situation.





BEST COPY AVAILABLE

SPENDING THE NIGHT

You now have fire, warmth, shelter, and plenty of wood stored, so your most important immediate problems are solved. If you told someone where you planned to hunt and when you planned to return, all you have to do now is wait.

If your clothes are wet, you had better think of getting dried out. Remember, your body heat is being drained off rapidly into your wet clothing, and you must conserve as much as is possible. If you have dressed in wool, you are a lot better off in this respect, but you should still dry your clothes.

Start by taking off your outer clothes; wring and pound all the water possible from them. Heat them thoroughly, being careful not to burn them. When they have dried, remove your underwear, and put the outerwear back on. You may now work on the fire and gather more wood as your underwear dries thoroughly. As soon as the underwear has dried, put it back on, then dry the outerwear thoroughly. You will have prevented exposure and possible pneumonia in doing so and made yourself a lot more comfortable.

Don't pay too much attention to any shooting you hear just at dark, but be listening intently for shots after dark. The usual emergency signal is three well-spaced shots. Listen for a car horn or chainsaw. Have your compass ready, and if you hear a signal, try to take a bearing on it by the light of your fire. If there are three shots, you should answer with two yourself, by pointing your gun directly into the air and firing.

Shots heard just after dark are probably fired by your chums; if they are properly equipped, they can get you out without help. Shots later in the evening will probably be an organized search led by wardens who are well-trained in retrieving lost hunters from the woods.

These wardens or conservation officers will fire three spaced shots and await a two-shot reply from you to take a bearing on. If you are short on ammo, you can answer with one shot, but keep the gun pointed up. Remember, if you can hear them, probably they can hear you. All you should do now is wait, keep your fire going, and listen.

After the search party has traveled some distance, they probably will shoot again, so you should be ready to answer. Remember that they are better equipped than you to travel, so stay put, and keep answering their signals until they are within shouting distance. Any movement on your part will just confuse things now. Save your voice, and don't shout until you know help is near. Shouting at the empty woods will only add to your depression and make you hoarse. Keep an empty cartridge case [illegible]'v for a whistle, as the sound will carry further than a shout.

What happens if help doesn't arrive the first night? Don't try to stay awake all night listening for signal shots, because if you haven't heard any by 9:00 or 10:00 p.m., you probably won't be hearing any before morning, so the best thing for you to do at this point is sleep. Sleep conserves and replenishes your energy and tends to clear your mind. With a little proper preparation, you should be able to sleep quite com-

30

fortably. Start by piling any available stones around the fire and heat them through. Using a stick, lay the heated rocks out as flat as possible in the area where you plan to sleep. Cover them with a generous amount of green boughs, and your bed will remain warm all night. If loose stones are not available, build your fire against a large rock or ledge or in a small low spot in the ledge. After a couple of hours, remove the fire and make your bed in the warmed area.

A WARM BED CAN BE MADE FROM ROCKS & BOUGHS

In your survival kit should be a large square of aluminum foil. This can be used for many things—for instance, a reflector. By using supporting sticks, you can wrap the foil part-way around your fire to direct the heat toward your sleeping area. You can also use your aluminum foil to fashion a drinking cup or a boiling can.

Eating sweets before retiring gives a boost to your metabolism (chemical change needed for heat generation) which lasts long enough to allow sleep. Remember to keep your head well covered; it might help to pull your earflaps down and wrap your bandana around your head first. You may button up your neck now because little sweating will occur. With dried, warmed clothing, a brush bed, heated stones or logs about you, and your heat reflector working, you should sleep fairly well.

Your senses will be acutely alert, and you may awaken several times throughout the night to strange noises; but remember, there is nothing in the woods that will hurt you. When you awaken, make sure that nearby search parties aren't missing you. Listen for shouts, horns, or shots; freshen the fire; rearrange your clothes; fluff your bed; reheat your stones or trade spares around; warm your socks again, and go back to sleep. Remember to keep boots lightly laced.

Trappers, even in this century, lived in the woods just as you are now; they loved it, and you can enjoy it.

TIPS TO KEEP WARM BY

1. Remember, thickness combined with dead air is warmth. Even totally dead, dry grass can be used. By stuffing it into clothing or around your sleeping area, you can make effective dead air insulation as the Indians did. Wrapped around

32

knees, ankles, elbows, feet, and chest, it will help tremendously to maintain body heat. At least a quarter inch should be used.

2. When your head is covered and your body warm, your extremities have a better chance to keep warm. In some cases, 25 to 70 percent of the heat loss is through an uncovered head. A bandana over the head and a cap with flaps down is a warming combination.
3. Open your shirt front, uncover your head, take off your jacket, unbutton wrist cuffs, and ventilate before resting and sleeping. Don't enter sleeping quarters when you are sweaty.
4. Before retiring, eat something, sweet if possible. Flex muscles, work them against each other, strain them (but don't sweat), and when you lie down, warmth will have started.

SIGNALS

When daylight comes, you have two goals:

1. Have signals ready.
2. Maintain mental control (stay put).

There are a lot worse places to be than the woods. You have survived the first night, and now you should put forth a strong effort to be as busy as possible. An idle mind can only work against you! An alert busy mind is of paramount importance now. Don't sit fretting about how cold you are. Do something about it! Now's a good time to keep repeating, "God helps those who help themselves." Get some wood and build the

fire up good and hot. Warm yourself through and through. If you have food left, eat a little. Celebrate a little to see the morning light.

After you are warm and alert, make an honest decision. Do you have any real idea where you are? If you do, and you have a compass and bearings, or if you have snow to backtrack on, O. K., leave, but remember, you will probably be a lot wiser to stay put. Wouldn't you really be better off making ready for signals, and building a warmer shelter than striking off through the woods, using up precious energy and not knowing for sure where you are headed?

If you absolutely must move on, follow this plan: Leave a message—by note, stamped in snow, or carved in a tree. Set up some sticks or stones pointed in your direction of travel.

These two woods-travel tips may help you find your way out: First, virtually all of the woods have been cut-over at some time or another, and almost anywhere you go you may find a skid or twitch road that the loggers used. If your luck is really good, you may find one that is still in use, or maybe even a main hauling road. The trouble is knowing which way to travel on a woods road — one way leads to civilization and the other usually goes deeper and deeper into the woods. You can find your way out by knowing that in making these roads, bulldozers pushed their way in toward the deep woods; trees pushed over on the roadside will lean in that direction. You merely have to walk opposite the direction of lean, or against the tree tops. Also, where twitch roads come into main hauling roads, the turn

will be in the direction of civilization.

MAIN HAULING ROADS ARE USUALLY JOINED AT AN ANGLE BY SIDE ROADS. ALSO, TREES PUSHED OVER ON THE ROADSIDE WILL INDICATE WHICH WAY TO TRAVEL.

You can also follow a brook downstream. The smallest trickle of water deep in the woods eventually ends up in the Atlantic Ocean after passing through ponds and lakes and joining with streams or rivers. You won't have to follow it all the way to the ocean before you encounter a camp, or a road, or maybe even a town.

Don't let these woods-travel tips encourage you to try to find your own way out. Remember, except

in an unusual circumstance, you are far better off to wait where you are. Help will come.

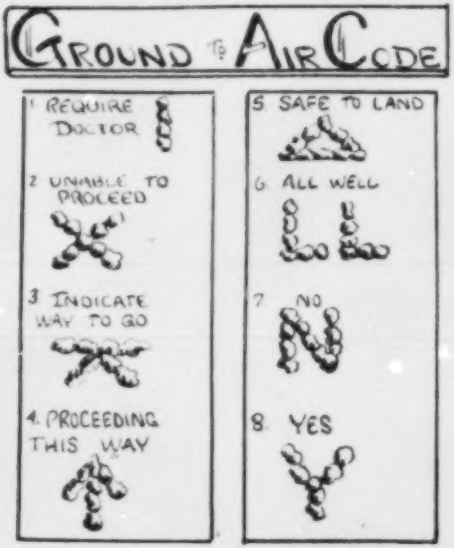
The north country has many experienced guides as well as wardens and conservation officers who will be looking for you, from the air and on foot, so get to work on having the best signal fire possible. You won't need an especially big fire as long as it is burning hot and you have boughs ready to put on for smoke when you hear a plane. Any green boughs will do, but be careful not to smother your fire. Water sprinkled on the edges of a fire will also work well.

There are several important things to remember: If you get into the habit of wearing some hunter orange clothing—such as a cap or vest, or both—you'll always be your own signal, as this can be seen

BOUGHS PLACED OVER A GOOD FIRE MAKES AN EXCELLENT SMOKE SIGNAL

for miles from a plane. Your survival manual cover can also serve as a signal. A mirror can be a very effective signal, but you must practice with it in order to use it effectively.

Also, you can stamp out a message in snow. Pick a flat place in an opening, if possible. The shadows show well from the air. Better still, try to find stones, trees, brush, etc., and lay them in contrast against the snow. Once you start your signals, do not leave the area—someone will be coming.



37

If you are spotted by a plane and conditions permit, the pilot will cut his engine and fly over low and attempt to give you directions. If there is a road, river, or pole line nearby, he will fly over low in a direct route toward it. He will then circle and repeat this several times so that you can seek your own way out. If you don't understand the plan's signal, *stay put.*

MENTAL CONTROL

Chances are, you'll spend only one night in the woods. Given a few hours of good flying weather and a smoke signal, search planes can locate you with no difficulty — or maybe a ground search party will find you first.

But what if the planes can't get up, or, worse, no one reported you missing because you failed to tell someone where you were going and when you'd be back? You may be faced with a longer stay in the woods until you are found.

Now an important goal for you is to maintain mental control. In other words, keep your cool. Through the years, there have been repeated instances where hunters have been lost in the woods without food, fire, or shelter for over a week and were in good condition when they finally were found.

On the other hand, there have been cases where lost hunters have panicked, lost good judgment and self-control and perished in less than one day.

How do you keep control?—by being just as busy

38

as you can possibly be. Gather a lot of firewood, fix up a comfortable campsite, and have your signals ready. Wash up if you have a chance; you'll be amazed at how much clean hands, feet, and face can improve your spirits. It'll probably help if you remember all the people who take vacation and pay a lot of good money to camp out in the Maine woods just as you are doing now. And as we mentioned before, old-time guides, woodsmen, and trappers spent their lives doing it. Relax—you may even enjoy your stay in the woods.

EDIBLE WILD FOODS

We will start this section by quoting a foremost survival expert who says:

> "I have serious reservations about edible plants. First, why? A person can survive for a week with no food and only water, without any real problems. Second, while there are no animals in the woods that will set out to harm you, there are a couple of plants that will do you in. Why gamble with it?"

Please note, food isn't your important need — water is. The human body generally requires about two quarts of water per day in cold weather. Your body will lose two or three quarts of water per day regardless of water intake. If intake does not equal output, dehydration occurs. In the woods, finding water should be no problem, so drink freely. If possible, boil it first, just to be on the safe side.

Coming back to food: accept the fact that it is the last thing you should concern yourself with. You could go without food for several weeks. Take stock of your food supply, and ration it so you can eat regularly. Two meals a day is best for your system, supplemented with plenty of water.

You may have a chance to kill some bird or animal that comes near your campsite, but here again, you have to be frank and honest with yourself. If half-cooked, strange meat would make you ill at home, it will cause you that much more discomfort in a survival situation. Mother Nature has food available to supplement those things in your survival kit, but it must be approached with discretion.

There are a couple of simple rules governing edible plants:

1. Leave all mushrooms alone. They are mostly water and aren't worth the gamble.
2. A good test on fruit types is to cut them horizontally. If they have star-shaped seed compartments, such as an apple, they are edible. But if they have a single seed, much like a peach, you had better not risk eating them.

The various nuts are all edible, but some can cause serious stomach discomfort if eaten in any quantity.

Most cold-water fish spawn in the fall in the shallow, gravel areas of brooks and streams; they can be pretty easy prey for a lost hunter.

All of the birds and animals in the woods are edible even though some are not too palatable.

If you get either fish or game, you must be sure to cook it thoroughly. If you have carried a small can

in your survival kit—such as a Vienna sausage can or a bandaid box—you have a boiling pot. If you haven't, one can be fashioned from your aluminum foil.

Cut any meat in small pieces and boil it thoroughly. Remember, the broth will have as much nutrition value as the meat itself. If you can't boil it, cut meat in small squares and cook it on a stick.

Again, we want to state that food is the least of your worries. With plenty of water, your system will sustain itself for long periods with no food or with what you have in your survival kit. Keep your mind off your stomach, and put your effort into your shelter and signals.

FIRST AID

Our comments on first aid will be limited mainly to self-treatment of those injuries which are most common among hunters or persons lost in the woods. We recommend that you prepare yourself thoroughly for emergencies by taking a Medical Self-Help course or a First Aid course; these are offered in many communities. If this is not possible, obtain a good first aid manual and study it thoroughly.

Unless you carry a first aid kit with you into the woods—and this is a good idea—you will have to rely on the items in your survival kit and your ingenuity.

Cuts and Wounds

The bleeding from almost all cuts can be stopped by direct pressure with the hand or a finger. A pad

of cloth—preferably a sterile dressing—will help. When the bleeding stops, fasten the pad in place with tape or strips of cloth; maintain pressure but not enough to stop circulation.

If direct pressure does not stop the bleeding, apply finger pressure on arteries where they are next to bones. The two such pressure points which are most effective are the brachial point on the inside of the arm between shoulder and elbow, and the femoral point in the groin about where your hip and leg join on the front. Pressure on these points will usually stop any bleeding on arms and hands or legs and feet.

If heavy bleeding persists after trying both of the above techniques a tourniquet can be used. Don't use wire, string, or anything narrow that could cut into the tissue; instead use your bandana, belt, or strips of cloth. Make a pad out of a piece of cloth and place this under the tourniquet to act as a pressure pad and to protect against injury to the tissue. Place the tourniquet about two inches above the injury, take two full turns and tie it off with a knot. Place a stick through the knot and twist just enough to stop the bleeding. Once a tourniquet has been applied and you have stopped the bleeding leave the tourniquet alone and place a tag or note around the patient's neck or in some way mark the patient so that a doctor or anyone knows that a tourniquet has been applied. Remember, a tourniquet should be used only if brisk bleeding can not be stopped by direct pressure over the wound or digital pressure on pressure points.

Fractures

The objective in treating fractures is to prevent the broken bone ends and adjacent joints from moving. If you are not sure there actually is a fracture, treat it as you would a fracture, just to be safe.

A broken bone should be splinted. Cut tree branches make natural splints; use some cloth padding between skin and branch for comfort. Tie the splint in place with a belt, strap, handkerchief, etc., but don't cut off circulation.

Sprains

One of the most common woods injuries is a sprained ankle. Taping or wrapping the ankle firmly will permit you to walk short distances without too much difficulty. Do not wrap so firmly that you cause swelling or impair circulation.

Frostbite

Your nose, ears, cheeks, fingers, and toes are the most likely parts to freeze in cold weather. Both low temperature and wind are factors in frostbite. An early symptom may be slightly flushed skin color, later changing to white or greyish-yellow. Pain (sometimes) or loss of sensation is a warning of impending freezing. Firm pressure with warm hand is helpful, but do not rub the affected part with hand or snow. Fingers can be warmed in armpit. Cover affected part with woolen materials. Drink coffee, tea, or soup. Immerse frozen part in water at body temperature; don't use hot water. Exercise fingers and toes after they are re-warmed.

If your toes are frozen and you absolutely must walk out of the woods, the toes should not be thawed out until you have reached safety. The pain and swelling that accompany thawing might prevent you from putting your shoes on again or possibly prevent you from walking.

Prolonged Exposure to Cold

Re-warm body as quickly as possible. Drink hot liquids. Huddle near fire. Remain in shelter out of wind. Dry clothes and keep dry. Exercise mildly.

Shock

To help prevent shock after bad injury or loss of blood, keep warm, lie down or keep your head low (except in case of head injury), drink liquids.

Burns

Burns received in a survival situation will most likely be of a minor nature but should not be ignored. Do not try to clean the burn. Do not break blisters. Unless sterile dressing or clean, freshly ironed handkerchief is available, leave the burn exposed. Do not use iodine or antiseptic on burns. Do not apply grease, butter, or cotton.

Heart Attack

Symptoms of a heart attack include a severe, gripping pain in the center of the chest, difficulty in breath-

ing, pain spreading to the neck and to one or both arms and sometimes to the face, loss of control of normal body functions, profuse sweating, "fluttery" feeling and rapid pulse. If you think you are having a heart attack, lie down with your head just slightly raised. Loosen any restrictive clothing to ventilate well and promote good breathing.

Your actions will be governed by the amount of residual pain after the initial attack passes. If you begin feeling cool, refasten clothes to stay warm. If you fire signal shots, do not take the shock of recoil on your shoulder; rest the gun butt on the ground. Build a small fire if wood is handy and can be gathered with an absolute minimum of exertion. Even if you begin feeling better, do not exert yourself in any way. Plan your moves carefully. Don't panic—help will come.

WATER SAFETY FOR OUTDOORSMEN

Most sportsmen use relatively small boats for their sport such as skiffs, canoes, and small aluminum or fibreglass motorboats. State laws require the registration of any boat equipped with a motor. In addition, it is mandatory to carry safety equipment such as lifesaving devices, lights, whistles and fire extinguishers depending on the size and type of the watercraft. Check your State Boat Law for necessary legal and safety details.

In addition to the required safety equipment, extra common sense items such as an anchor with line, compass, extra paddle or oar, a bailer, flashlight and a small

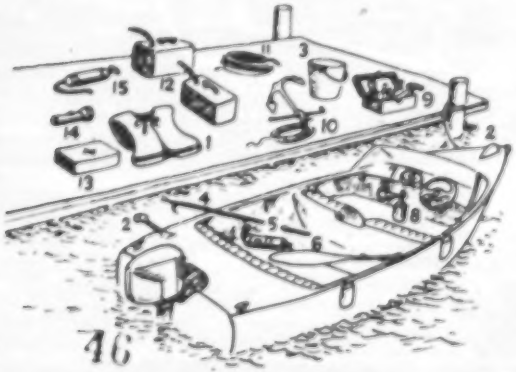
kit of tools to make simple repairs and adjustments to your motor help make your trip safer and more enjoyable.

Always remember to leave word at home or with friends as to your general whereabouts so that in case you over stay, get lost or run into trouble, searchers

WATER SAFETY ITEMS

BOAT SAFETY CHECK LIST

1. Approved life-saving device for each person.
2. Proper lights (not required if boat is not operated after sunset).
3. Bailing bucket.
4. Boat hook.
5. Fire extinguisher.
6. Paddle or oars.
7. Compass.
8. Horn or whistle.
9. Tool kit.
10. Anchor.
11. Line.
12. Gasoline cans (spare).
13. First-aid kit.
14. Flashlight.
15. Bilge pump.



will have a starting point and can assist you as quickly as possible.

All sportsmen who use the waterways should develop some proficiency in swimming and simple floating techniques. Learning to swim and handle oneself in the water is one of the best safety devices available.

Many hunters and fishermen are drowned each year by carelessness on or around the water. The most common reasons are usually:

1. Too small a boat for the water to be covered.
2. Overloading the boat with people, gear, etc.
3. Burying lifesaving gear with other items being carried so they are not readily accessible.
4. Impaired operating ability due to use of alcohol.
5. Not keeping a sharp look out for obstacles or other boats.
6. Fast-changing weather in cold months.

Many of these tragedies could have been averted by some of these simple preventive steps:

1. Check weather reports frequently.
2. Learn weather signs yourself. Don't be fooled by calm water near shore, during an offshore wind waves can kick up ahead of you and cause trouble.
3. Keep your loads light. During cold weather take half your usual load. This greatly increases stability of the boat.
4. Don't stand up if you can help it and never shoot from a boat while standing or boat is moving.
5. Always wear your lifesaving device.
6. Confine your boating to daylight hours as much as possible.
7. When traveling on large streams or rivers remember to keep to the right side as much as possible. This will help prevent collisions and spills as you have already established the proper passing position; port to port.
8. As far as rapids and swift water are concerned remember that your topographical map will tell you

what's ahead just as on land. Learn the symbols for each type of obstruction. Do not run any swift water or rapids until you have carefully explored the area before running same. Better still take out and portage.

9. Lake travel can be dangerous because high waves can make up in a few moments so keep to the shoreline if possible. If you have to make your way to shore through high waves it's wise to quarter them slightly and slow your speed, and stay low in the boat.

10. When waves are coming against the stern, be sure the boat does not "fall off" a wave. This is called "broaching" and causes the boat to go sideways into the next wave resulting in a spill.

11. When heading into a wave do so with just enough speed to make headway and not cause spray or water to fall into the boat. High speed will pound a boat to pieces and often cause the bow to "stick in" taking heavy amounts of water aboard. In all cases take your time and use your head.

LOADING YOUR BOAT

There are several things that should be remembered when loading a boat. Distribute the load evenly; keep the load low; don't stand up in a small boat; don't overload. The weather and water conditions should be taken into account, too. If the water is rough, the number of persons carried should be reduced.

The U.S. Coast Guard requires that manufacturers of certain boats display on each boat a "U.S. Coast Guard Capacity Information Label". This requirement

applies to all monohull boats less than 20 feet in length manufactured on or after November 1, 1972. Exceptions to this rule are sailboats, canoes, kayaks, and inflatable boats. The "U.S. Coast Guard Capacity Information Label" is intended to provide safety information to the boatman, who may not have expert knowledge of a particular boat's characteristics, in order to reduce the dangers of inadvertent overloading or overpowering. These recommended values are for fair weather and do not relieve the boatman of the responsibility for exercising individual judgment.

In the absence of a capacity plate, there is a simple rule of thumb to help prevent overloading of boats. To determine the number of persons you can safely carry:

$$\frac{L \times W}{15} = \text{_____ (Number of Persons)}$$

L=Overall length of boat
W=Maximum width of boat (both dimensions in feet and tenths of feet.)

The result, or the next smallest whole number if the result is a fraction, gives the number of persons that can be safely put aboard, in good weather conditions.

You should verify the capacity of your boat before loading to insure the boat will in fact safely carry the planned load.

COLD WATER SURVIVAL

Very often boating accident victims are given some warning that they are in danger of sinking or capsizing

such as a sudden squall, a new leak, high winds and subsequent waves, taking on additional passengers against good judgment, picking up survivors from another boating mishap, or even a motor breakdown during a storm or near breaking shoals.

When given such warnings do the following, make

SIGNALS

1. WAVE HANDS UP & DOWN
2. " CLOTH IN A CIRCLE OVERHEAD
3. SHOUT for HELP
4. STAY WITH BOAT-CLIMB ONTO IT

TRY NOT TO PANIC

5½

sure your life jacket is tightly tied about you, button all clothing as tightly as possible, tape or tie clothing at wrists and ankles to minimize circulation, wrap scarf or clothing around neck, put up parka hood, tuck pants into boots or socks, put on gloves or mittens, and limit body movements in water as much as possible. Stay with the boat and do not attempt to swim for shore.

Unless you are very close to shore stay with your boat and grab whatever articles that will float. An oar, paddle, gas can, thermos jug or a hat or even a rubber boot will hold you up.

A signal of distress on the water is a bright piece of cloth waved above the head in a circular motion or waving arms up and down. SOS is the international call for help. This can be done with a light at night by simply showing a beam for three short flashes; three long flashes, and three short flashes.

Pause frequently between signals for accurate identification by shore people. In a real emergency you could ignite a fire on a floating object near your boat but never on the boat itself.

Remember that your survival manual and kit are just as important aboard your boat as in the woods and that the kit will be invaluable when reaching shore. Start a fire and eat as much food as you have available, especially that rich in sugar for quick body heat and energy. This will keep you warm.

Each individual will vary as to the amount of cold they can stand. However, be assured that time is critical and that under the best conditions you only have about 23 minutes at temperatures between 32 degrees and 40 degrees.

52

A skin diver is protected by a thin layer of warmed water that lies near his skin trapped in the pores of his suit. Your clothing will act to help trap water near the skin in the same manner as a skin diver's suit although of course much less efficiently. Hunters and early spring and summer fishermen usually dress warmly and carry spare coats and rain gear.

You will live longer submerged in cold water than you would in cold wind after a thorough wetting. You must get out and get a fire built however, in order to survive at all.

WATER RESCUE

Remember that this is a science of its own and that whole books have been devoted to the proper methods. Take a life-saving course from the Red Cross or local "Y" and learn some of the simple mouth to mouth resuscitation techniques to help prevent people from drowning.

Be very careful how you approach a drowning person in deep water if they are struggling. He or she may take you down with them as they are very strong and determined when struggling.

If the person revives and grabs you when you are rescuing him, — strike him hard to dislodge him! This is life or death, both yours and his.

You should take anything with you that will float or throw it toward the victim, this gives him an objective and may encourage him to swim.

If person is unconscious tow him by the hair. This

keeps the head out of water and streamlines the operation.

Water rescue is in short simply using what is at hand and one's head. A very famous story will illustrate our point:

A boat load of mill workers were being ferried across

1. CAREFULLY APPROACH A DROWNING PERSON

2. TRY TO REACH HIM WITH A FLOAT OF SOME KIND

3. IF A PERSON IS UNCONSCIOUS TOW HIM BY THE HAIR

THIS KEEPS THE HEAD OUT OF WATER...

the Clyde River in Scotland one evening some years ago. The ferry was badly overloaded and promptly capsized.

A passenger, James Lambert, was an excellent swimmer and a well known riverman. Immediately several people fastened themselves onto him and others onto

55

them. Lambert, finding it impossible to swim or escape, simply sank and found bottom to be about ten feet under. He kicked away diagonally and gained a few feet toward the wharf. Again and again he did this until near enough to be aided by ropes and boat hooks. It was found that he had delivered 17 passengers on his first trip. Not resting, he went back and brought in two girls, again he went out and brought in a young girl and her boy friend who were drowning together. Now he found himself so spent he could not cling to the wharf and in the clamor he was unnoticed by all save an old man with a cane.

He advanced the cane and as Lambert froze to it guided him haltingly around the piles to shoal water where he regained his strength. A man who had saved 21 people by skill and strength had in turn been saved by an old man who retained but one sense — common sense. Remember to keep yours.

SPECIAL WARNING FOR SNOWMOBILERS

Snowmobilers should be aware of the dangers of operating on frozen bodies of water. Thoroughfares, inlets, outlets, and spring holes are dangerous areas and should always be avoided. Night travel is especially dangerous, because snowmobilers can easily lose their sense of direction and unknowingly operate in these unsafe areas. Sportsmen who frequently operate on frozen bodies of water should wear a flotation type snowmobile suit and should carry, readily accessible, a knife, screwdriver, or other instrument which could be

used to pull themselves from the water in case of a break-through. The quicker you are able to remove yourself from the water the better chance of survival. It is important not to panic and to keep warm by building a fire or moving about without expending all of your energy which is needed to keep body heat. A good motto to follow is: IF YOU DON'T KNOW DON'T GO!

EFFECTIVE: 1 APRIL 1972—One Coast Guard approved personal flotation device (PFD) for each person aboard recreational boats, including sailboats, rowboats, kayaks, and canoes. New PFD's bearing Coast Guard approval will soon be identified by "Types I, II, III, or IV."

MANDATORY: 1 OCTOBER 1973—1. Boats sixteen (16) feet or over in length: one Type I, II, or III (wearable) for each person on board and one Type IV (throwable) in each boat. 2. Boats less than sixteen (16) in length and all canoes and kayaks: one Type I, II, III, or IV PFD for each person on board.

TYPE I—A Type I PFD is an approved device designed to turn an unconscious person in the water from a face downward position to a vertical or slightly backward position, and to have more than 20 pounds of buoyancy. Recommended for off-shore cruising. Acceptable for all size boats.

Example: Typical life preserver

TYPE II—A Type II PFD is an approved device designed to turn an unconscious person in the water from a face downward position to a vertical or slightly backward position and to have at least 15.5 pounds of buoyancy. Recommended for closer, in-shore cruising. Acceptable for all size boats.

Example: Typical buoyancy vest

TYPE III—A Type III PFD is an approved device designed to keep a conscious person in a vertical or slightly backward position and to have at least 15.5 pounds of buoyancy. While having the same buoyancy as Type II, the Type III has a lesser turning ability to allow for a comfortable design for water activities such as water skiing. Recommended for in-water sports, or on lakes, impoundments, and close in-shore operation. Acceptable for all size boats.

Example: A special purpose device

TYPE IV—A Type IV PFD is an approved device designed to be thrown to a person in the water and not worn. It is designed to have at least 16.5 pounds of buoyancy. Acceptable for boats less than 16 feet and canoes and kayaks and as a throwable device for boats 16 feet and over in length.

Example: Buoyant cushion.

Ring buoy

SPORTSMAN'S CODE

A few thousand years ago when a man took his weapon and went out looking for game, it was no one else's business how he did it. This is no longer the case. The hunter is no longer a savage. The privilege of enjoying the wonderful sport of hunting carries with it serious responsibilities that a true sportsman will not ignore. We urge you to subscribe to this SPORTSMAN'S CODE.

1. **Obey the Game Laws.** They are based on the best information available on game conditions and are designed to assure the continuance of this wonderful sport for years to come—for all of us.

2. **Be Adequately Armed for the Game You Are Hunting.** Hunt only with a mechanically safe firearm of sufficient power for the use intended. Then bear in mind the ability of that gun to inflict injury to others and yourself.

3. **Respect the Rights of Property Owners.** All your hunting will probably be done on someone else's land. Put yourself in the landowner's position: wouldn't you like to be asked if it's all right to hunt on your land? A few destructive hunters can spoil this fine privilege for everyone else. Stay clear of farm buildings, farm animals, farm children. Lumbermen and woodcutters have a right to be in the woods, too.

4. **Extend Courtesy to Your Fellow Hunters.** You've probably watched a good hunting dog honor another's point. A good hunter should surely be at least as courteous. Give the other fellow plenty of room to work in.

5. **Aim Only for a Clean Kill.** A deer is a beautiful, sensitive animal as well as a wary, intelligent prize. **Never shoot at a deer unless enough of the animal is clearly exposed so that you can hit a vital spot.** A snap shot at a distant flash of a deer's tail will probably result in either a miss or a wounded deer wandering off to die a slow, wasted, agonizing death. Or you may find you've shot another hunter. Don't have **either** on your conscience.

6. **Never Forget—Guns Don't Kill by Themselves. Always Remember—Practice Hunter Safety.**